Contents of Volume 24 (1987)

Nos. 1–2 issued December, 1986

G. Bernardi, G. Bernardi
Compositional Constraints and Genome Evolution **1**

E. Zuckerkandl
Polite DNA: Functional Density and Functional Compatibility in Genomes **12**

P. M. Sharp, W.-H. Li
An Evolutionary Perspective on Synonymous Codon Usage in Unicellular Organisms **28**

T. H. Jukes, V. Bhushan
Silent Nucleotide Substitutions and G + C Content of Some Mitochondrial and Bacterial Genes **39**

P. A. M. Michels
Evolutionary Aspects of Trypanosomes: Analysis of Genes **45**

M. Solignac, M. Monnerot, J.-C. Mounolou
Concerted Evolution of Sequence Repeats in Drosophila Mitochondrial DNA **53**

J. M. Jankowski, S. A. Krawetz, E. Walczyk, G. H. Dixon
In Vitro Expression of Two Proteins from Overlapping Reading Frames in a Eukaryotic DNA Sequence **61**

H. Bäumlein, J. Pustell, U. Wobus, S. T. Case, F. C. Kafatos
The 3′ Ends of Two Genes in the Balbiani Ring c Locus of *Chironomus thummi* **72**

N. Junakovic, V. Angelucci
Polymorphisms in the Genomic Distribution of Copia-like Elements in Related Laboratory Stocks of *Drosophila melanogaster* **83**

N. Junakovic, C. Di Franco, P. Barsanti, G. Palumbo
Transposition of Copia-like Nomadic Elements Can Be Induced by Heat Shock **89**

B. F. Koop, M. M. Miyamoto, J. E. Embury, M. Goodman, J. Czelusniak, J. L. Slightom
Nucleotide Sequence and Evolution of the Orangutan ϵ Globin Gene Region and Surrounding Alu Repeats **94**

L. Hendriks, E. Huysmans, A. Vandenberghe, R. De Wachter
Primary Structures of the 5S Ribosomal RNAs of 11 Arthropods and Applicability of 5S RNA to the Study of Metazoan Evolution **103**

Nos. 1–2 continued

S. F. Pietromonaco, R. A. Hessler, T. W. O'Brien
Evolution of Proteins in Mammalian Cytoplasmic and Mitochondrial Ribosomes **110**

J. J. Beintema
Evolutionary Role of Posttranslational Modifications of Proteins, as Illustrated by the Glycosylation Characteristics of the Digestive Enzyme Pancreatic Ribonuclease **118**

W. W. de Jong, W. Hendriks
The Eye Lens Crystallins: Ambiguity as Evolutionary Strategy **121**

O. Gascuel, A. Danchin
Protein Export in Prokaryotes and Eukaryotes: Indications of a Difference in the Mechanism of Exportation **130**

R. K. Conover, C. F. Brunk
Characterization of the Macronuclear DNA of Different Species of *Tetrahymena* **143**

J. Wolters, V. A. Erdmann
Cladistic Analysis of 5S rRNA and 16S rRNA Secondary and Primary Structure—The Evolution of Eukaryotes and Their Relation to Archaebacteria **152**

H.-P. Klenk, B. Haas, V. Schwass, W. Zillig
Hybridization Homology: A New Parameter for the Analysis of Phylogenetic Relations, Demonstrated with the Urkingdom of the Archaebacteria **167**

M. Loukas, C. Delidakis, F. C. Kafatos
Genomic Blot Hybridization as a Tool of Phylogenetic Analysis: Evolutionary Divergence in the Genus *Drosophila* **174**

N. Saitou, M. Nei
The Number of Nucleotides Required to Determine the Branching Order of Three Species, with Special Reference to the Human–Chimpanzee–Gorilla Divergence **189**

Indexed in *Current Contents*

No. 3 issued February, 1987

H. Ishikawa
Nucleotide Composition and Kinetic Complexity of the Genomic DNA of an Intracellular Symbiont in the Pea Aphid *Acyrthosiphon pisum* **205**

G. F. Shields, A. C. Wilson
Calibration of Mitochondrial DNA Evolution in Geese **212**

H. Tegelström
Transfer of Mitochondrial DNA from the Northern Red-Backed Vole (*Clethrionomys rutilus*) to the Bank Vole (*C. glareolus*) **218**

C. A. Mannella, J. Frank, N. Delihas
Interrelatedness of 5S RNA Sequences Investigated by Correspondence Analysis **228**

J. L. Gorski, I. L. Gonzalez, R. D. Schmickel
The Secondary Structure of Human 28S rRNA: The Structure and Evolution of a Mosaic rRNA Gene **236**

M. M. Smith
Molecular Evolution of the *Saccharomyces cerevisiae* Histone Gene Loci **252**

U. Zimny-Arndt, J. Klose
Qualitative and Quantitative Variability in Different Classes of Proteins: Comparison of Mouse and Rat **260**

M. F. Hammer, J. W. Schilling, E. M. Prager, A. C. Wilson
Recruitment of Lysozyme as a Major Enzyme in the Mouse Gut: Duplication, Divergence, and Regulatory Evolution **272**

J. L. Oliver, J. L. Sanz, R. Amils, A. Marin
Inferring the Phylogeny of Archaebacteria: The Use of Ribosomal Sensitivity to Protein-Synthesis Inhibitors **281**

Recently Published Papers in the Field of Molecular Evolution **289**

Indexed in *Current Contents*

No. 4 issued April, 1987

P. Savatier, G. Trabuchet, Y. Cheblounе, C. Faure, G. Verdier, V. M. Nigon
Nucleotide Sequence of the Delta–Beta-Globin Intergenic Segment in the Macaque: Structure and Evolutionary Rates in Higher Primates **297**

P. Savatier, G. Trabuchet, Y. Cheblounе, C. Faure, G. Verdier, V. M. Nigon
Nucleotide Sequence of the Beta-Globin Genes in Gorilla and Macaque: The Origin of Nucleotide Polymorphisms in Human **309**

E. M. Klinge, Y. R. Sylvestre, I. M. Freedberg, M. Blumenberg
Evolution of Keratin Genes: Different Protein Domains Evolve by Different Pathways **319**

S. Yokoyama, T. Gojobori
Molecular Evolution and Phylogeny of the Human AIDS Viruses LAV, HTLV-III, and ARV **330**

W.-H. Li
Models of Nearly Neutral Mutations with Particular Implications for Nonrandom Usage of Synonymous Codons **337**

L. N. Yager, J. F. Kaumeyer, I. Lee, E. S. Weinberg
Insertion of an Intermediate Repetitive Sequence into a Sea Urchin Histone-Gene Spacer **346**

T. Kunisawa, K. Horimoto, J. Otsuka
Accumulation Pattern of Amino Acid Substitutions in Protein Evolution **357**

Recently Published Papers in the Field of Molecular Evolution **366**

Announcement/Erratum **380**

Index to Volume 24

Indexed in *Current Contents*